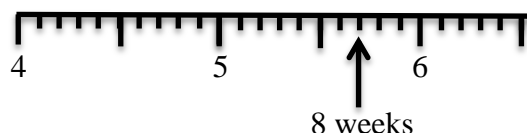
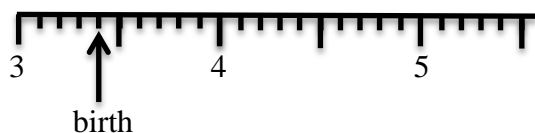


National 4 Homework 9

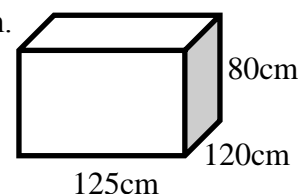
You can use a calculator in Qu's 2, 4 and 5.


Show all your working.

1. The scales show a baby's weight in kilograms when she was born and when she was weighed after 8 weeks.



- (a) What did she weigh after 8 weeks?
- (b) How much weight had she gained since birth?
2. Mike's heating oil tank is in the shape of a cuboid with dimensions as shown.




- (a) Calculate the volume of the oil tank.
- (b) During the winter months, Mike uses oil at a rate of 20 litres per day.
How many days will the oil last?
3.  Smartsave are selling lightbulbs at £4.80 each or on special offer at buy one get one half price.
Costcutters are selling the same lightbulbs which normally cost £4.80 on special offer at 15% off.
Jim needs to buy 5 light bulbs. Which shop is cheaper and by how much?

4. Tanya needs 440 grams of flour to make 2 cakes.
- (a) How many kilograms of flour will she need for 15 cakes?
- (b) Tanya buys her flour in 1.5 kilogram bags.
How many bags will she need to bake 15 cakes?

5. A football pitch is 110m long and has an area of 8250 square metres.
Calculate the perimeter of the pitch.



6.  A pizza is cut into 20 equal slices. Ben eats $\frac{2}{5}$ of the pizza, Carla eats $\frac{1}{4}$ and Liam eats the rest.
How many slices does Liam eat?

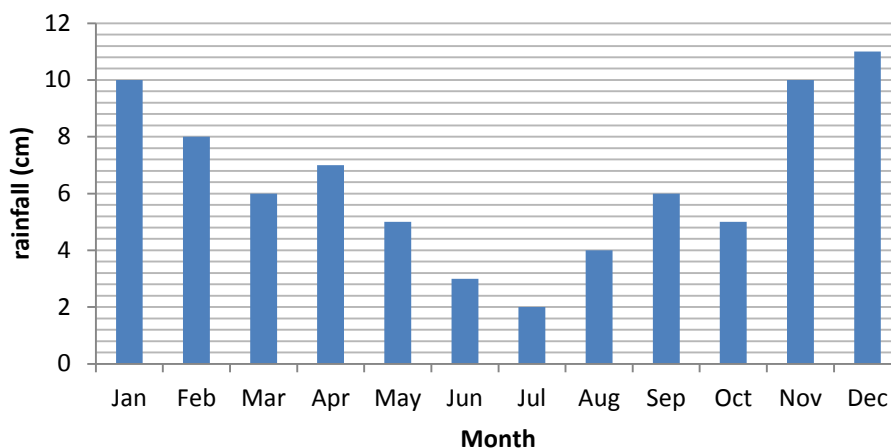
7. Mrs Parker is ordering her children's school uniform which displays the school logo.

Item of uniform	Age			
	5-6	7-8	9-10	11-12
Sweatshirt	£8.99	£9.49	£10.99	£11.99
Cardigan	£7.99	£8.99	£9.50	£11.00
Polo-shirt	£2.99	£4.00	£5.50	£6.00
PE t-shirt	£2.25	£3.75	£4.25	£4.75

She orders • 3 age 5-6 polo shirts
 • 2 age 7-8 sweatshirts
 • 1 age 9-10 cardigan
 • 1 age 7-8 PE t-shirt and 1 age 11-12 PE t-shirt.

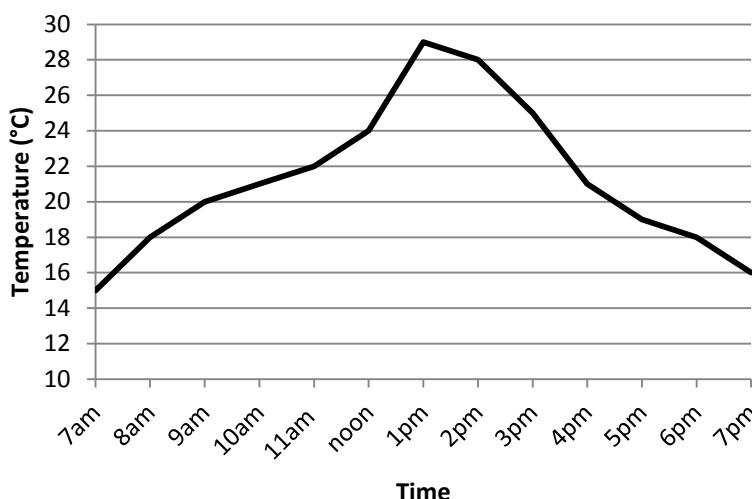
Calculate the total cost of her order.

8. The bar graph shows the rainfall over a year in London.



- Which was the wettest month?
- How much more rain fell in November than in May?
- How much rain fell altogether in January, February and March?
- In how many months did more than 5cm of rain fall?

9. Arthur is growing tomatoes in his greenhouse. He checks the greenhouse temperature every hour throughout the day.



- What was the temperature at 8am?
- What was the maximum temperature and when was it recorded?
- During which times did the temperature rise the most?
- Tomatoes grow best when they are in temperatures between 22°C and 30°C. For how long were Arthur's tomatoes in the ideal temperature range?

